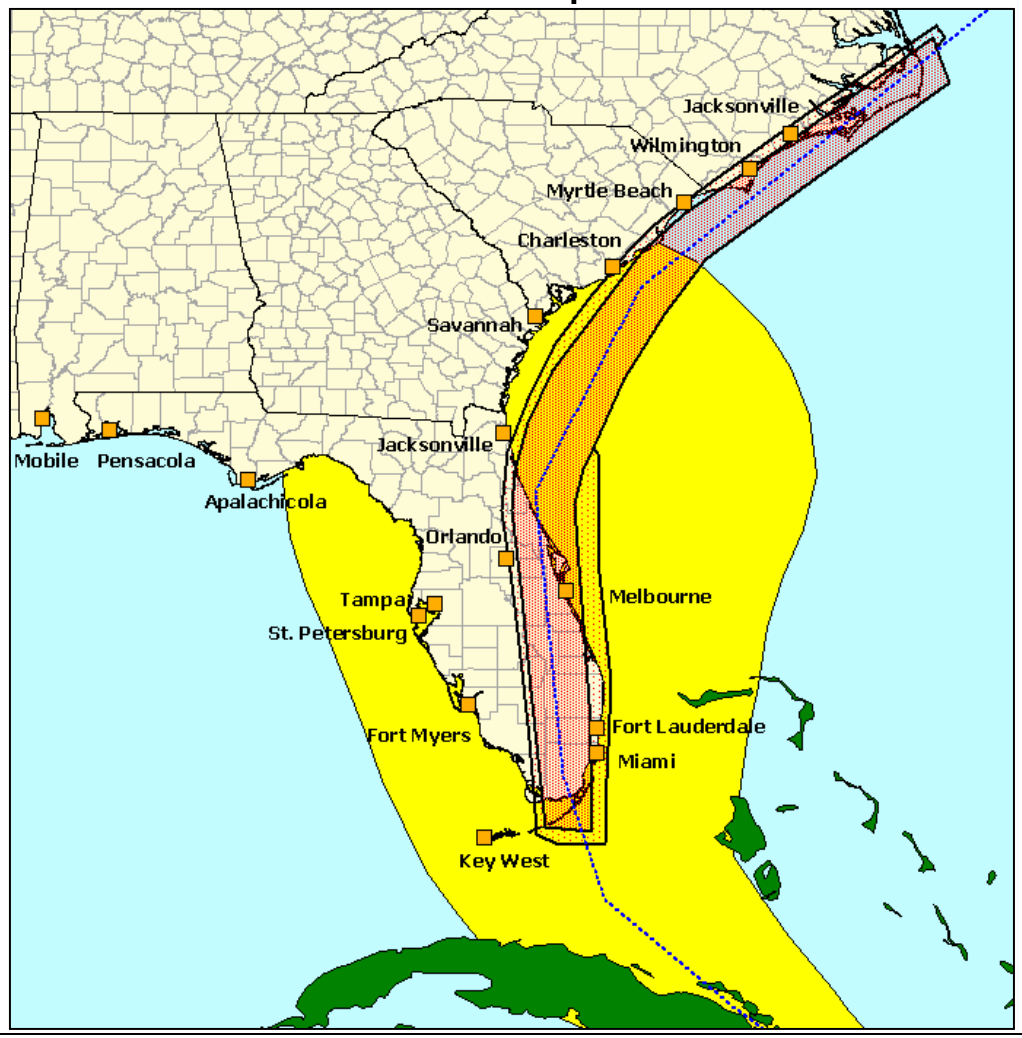
Hurricane Ernesto - Projected Damage Area

Landfall Expected In About **42** Hours

For Official Use Only!



Post Landfall Projected Damage Area

This model is based on a Category 1 storm making landfall south of Miami, FL.

Forecast Track

Projected Damage Areas
Cat 0-type damage
Cat 1-type damage

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Projected Damage

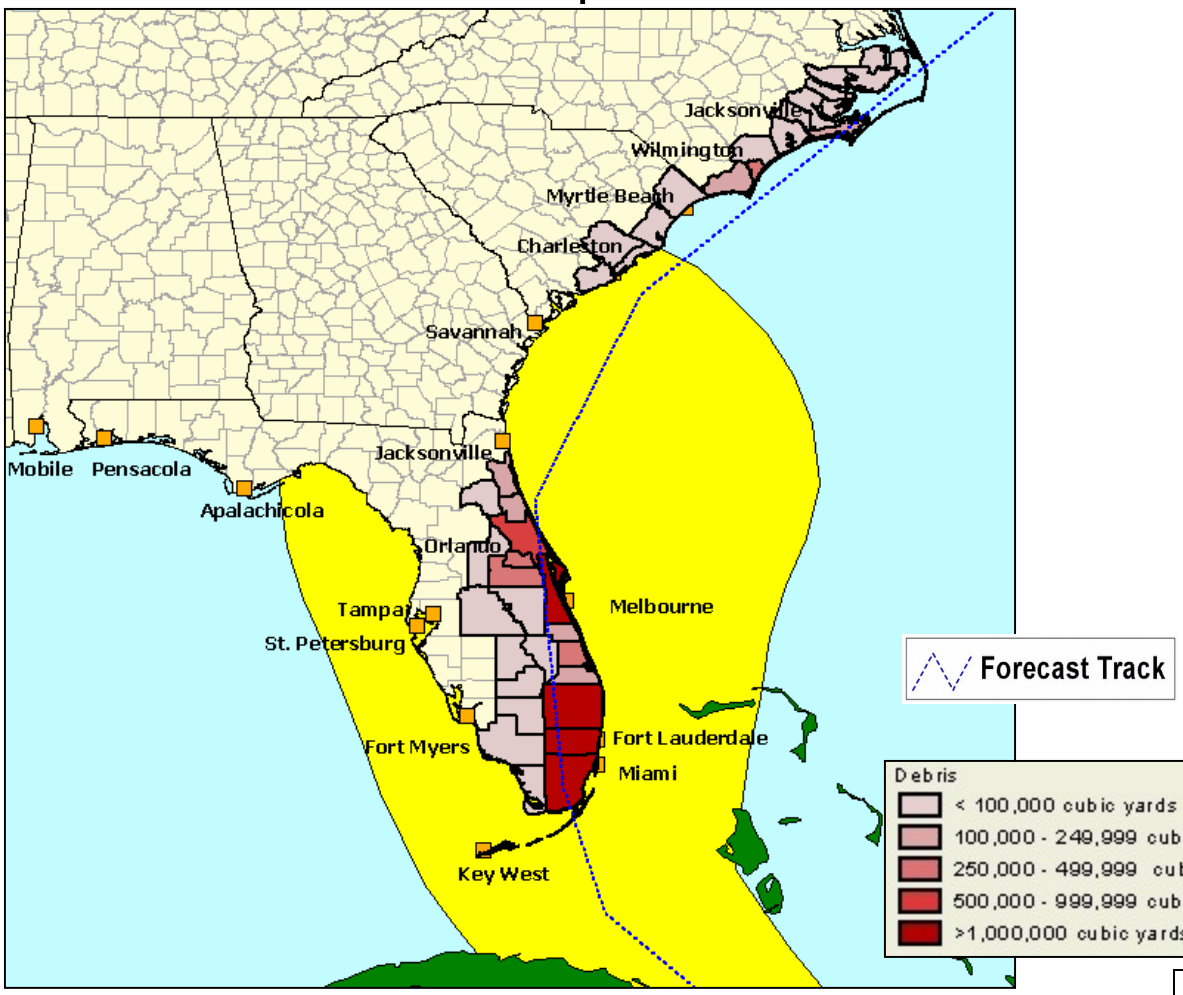
Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Debris Model

Landfall Expected In About **42** Hours

For Official Use Only!



Post Landfall Debris Model Results

Florida – 10,412,000 yd^3
North Carolina – 672,000 yd^3
South Carolina – 127,000 yd^3

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

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or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Debris Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Debris Model

Landfall Expected In About **42** Hours

For Official Use Only!

STATE	YARDS PER STATE	COUNTY	YARDS PER COUNTY
Florida			
		Brevard	1,031,000
		Broward	1,999,000
		Collier	3,000
		Dade	3,386,000
		Flagler	129,000
		Glades	16,000
		Hendry	35,000
		Highlands	14,000
		Indian River	245,000
		Lake	3,000
		Martin	108,000
		Monroe	50,000
		Okeechobee	72,000
		Orange	466,000
		Osceola	65,000
		Palm Beach	1,021,000
		Polk	2,000
		Putnam	1,000
		Seminole	343,000
		St Johns	109,000
		St Lucie	343,000
		Volusia	971,000
Florida	10,412,000		

STATE	YARDS PER STATE	COUNTY	YARDS PER COUNTY
North Carolina			
		Beaufort	1,000
		Brunswick	105,000
		Carteret	125,000
		Craven	41,000
		Dare	15,000
		Hyde	7,000
		Jones	2,000
		New Hanover	284,000
		Onslow	62,000
		Pamlico	12,000
		Pender	17,000
		Tyrrell	1,000
North Carolina	672,000		
South Carolina			
		Berkeley	1,000
		Charleston	32,000
		Georgetown	25,000
		Horry	69,000
South Carolina	127,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

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US Army Corps of Engineers

Hurricane Ernesto Debris Model

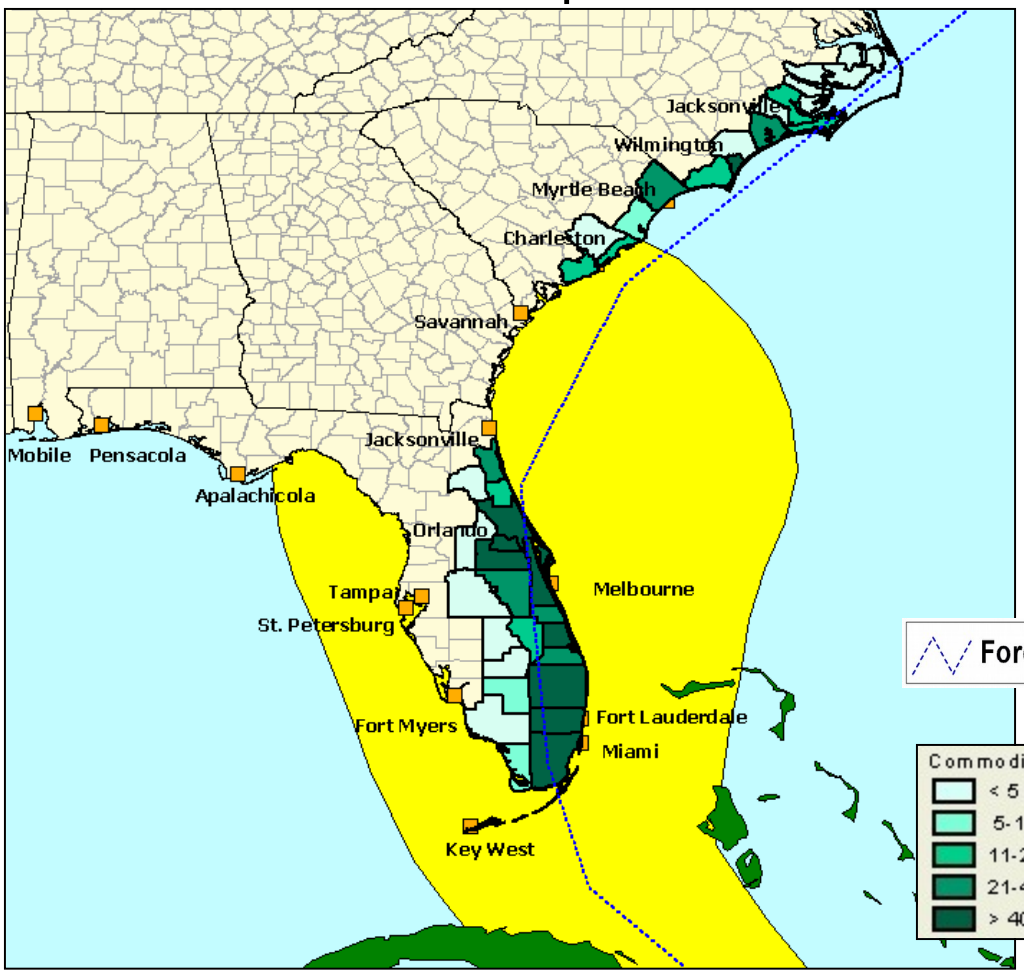
Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Commodities Model

Landfall Expected In About **42** Hours

For Official Use Only!



Post Landfall Ice/Water Model Results

Day One/ Day Two/ Day Three

Florida – 50/100/150
North Carolina – 25/25/25
South Carolina – 8/8/8

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day and 3 liters of water per person per day) and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Commodities Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Commodities Model

Landfall Expected In About **42** Hours

For Official Use Only!

STATE	TRUCKLOADS	COUNTY	TRUCKLOADS PER COUNTY
Florida			
		Brevard	18
		Broward	49
		Collier	1
		Dade	38
		Flagler	0
		Glades	1
		Hendry	0
		Highlands	1
		Indian River	5
		Lake	1
		Martin	0
		Monroe	0
		Okeechobee	0
		Orange	11
		Osceola	3
		Palm Beach	24
		Polk	1
		Putnam	1
		Seminole	9
		St Johns	0
		St Lucie	5
		Volusia	9
Florida	177		
North Carolina			
		Beaufort	1
		Brunswick	3
		Carteret	2
		Craven	1
		Dare	1
		Hyde	1
		Jones	1
		New Hanover	8
		Onslow	3
		Pamlico	1
		Pender	2
		Tyrrell	1
North Carolina	25		
South Carolina			
		Berkeley	1
		Charleston	2
		Georgetown	2
		Horry	3
South Carolina	8		

The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day and 3 liters of water per person per day) and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system. The assumption in this scenario is that 30-40% of the resident population affected by Ernesto will have power outage in this area will cause a need for water.

Details about this model may be obtained at
https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Commodities Model

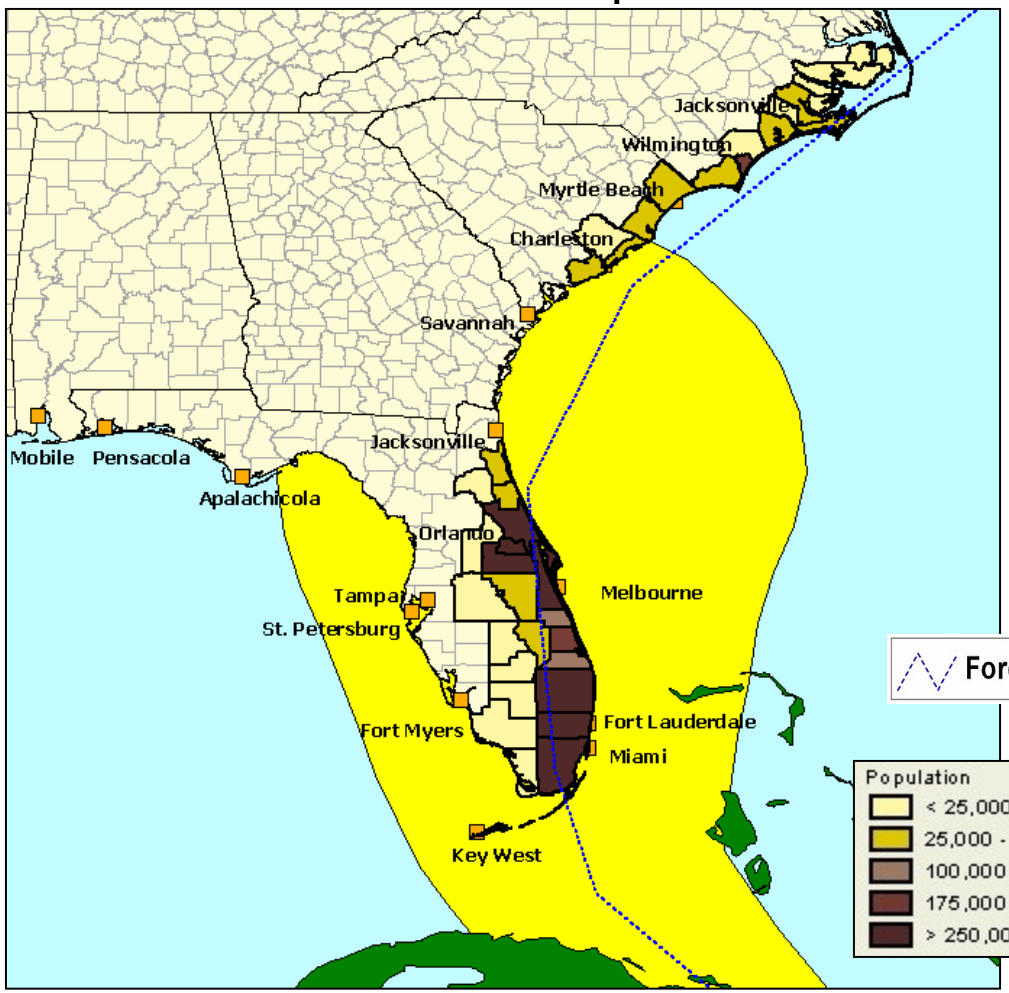
Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Population Model

Landfall Expected In About **42** Hours

For Official Use Only!



Post Landfall Population Model Results

Florida – 8,132,000 persons
North Carolina – 492,000 persons
South Carolina – 161,000 persons

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast. The number of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Population Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Population Model

Landfall Expected In About **42** Hours

For Official Use Only!

STATE	POPULATION	COUNTY	POPULATION PER COUNTY
Florida			
		Brevard	531,000
		Broward	1,780,000
		Collier	3,000
		Dade	2,377,000
		Flagler	75,000
		Glades	6,000
		Hendry	20,000
		Highlands	11,000
		Indian River	129,000
		Lake	6,000
		Martin	140,000
		Monroe	24,000
		Okeechobee	40,000
		Orange	465,000
		Osceola	80,000
		Palm Beach	1,267,000
		Polk	3,000
		Putnam	1,000
		Seminole	347,000
		St Johns	99,000
		St Lucie	241,000
		Volusia	487,000
Florida	8,132,000		

STATE	POPULATION	COUNTY	POPULATION PER COUNTY
North Carolina			
		Beaufort	1,000
		Brunswick	73,000
		Carteret	63,000
		Craven	35,000
		Dare	14,000
		Hyde	3,000
		Jones	2,000
		New Hanover	179,000
		Onslow	96,000
		Pamlico	11,000
		Pender	14,000
		Tyrrell	1,000
North Carolina	492,000		
South Carolina			
		Berkeley	1,000
		Charleston	49,000
		Georgetown	30,000
		Horry	81,000
South Carolina	161,000		

The number of persons estimated to be within hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Population Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Households Model

Landfall Expected In About **42** Hours

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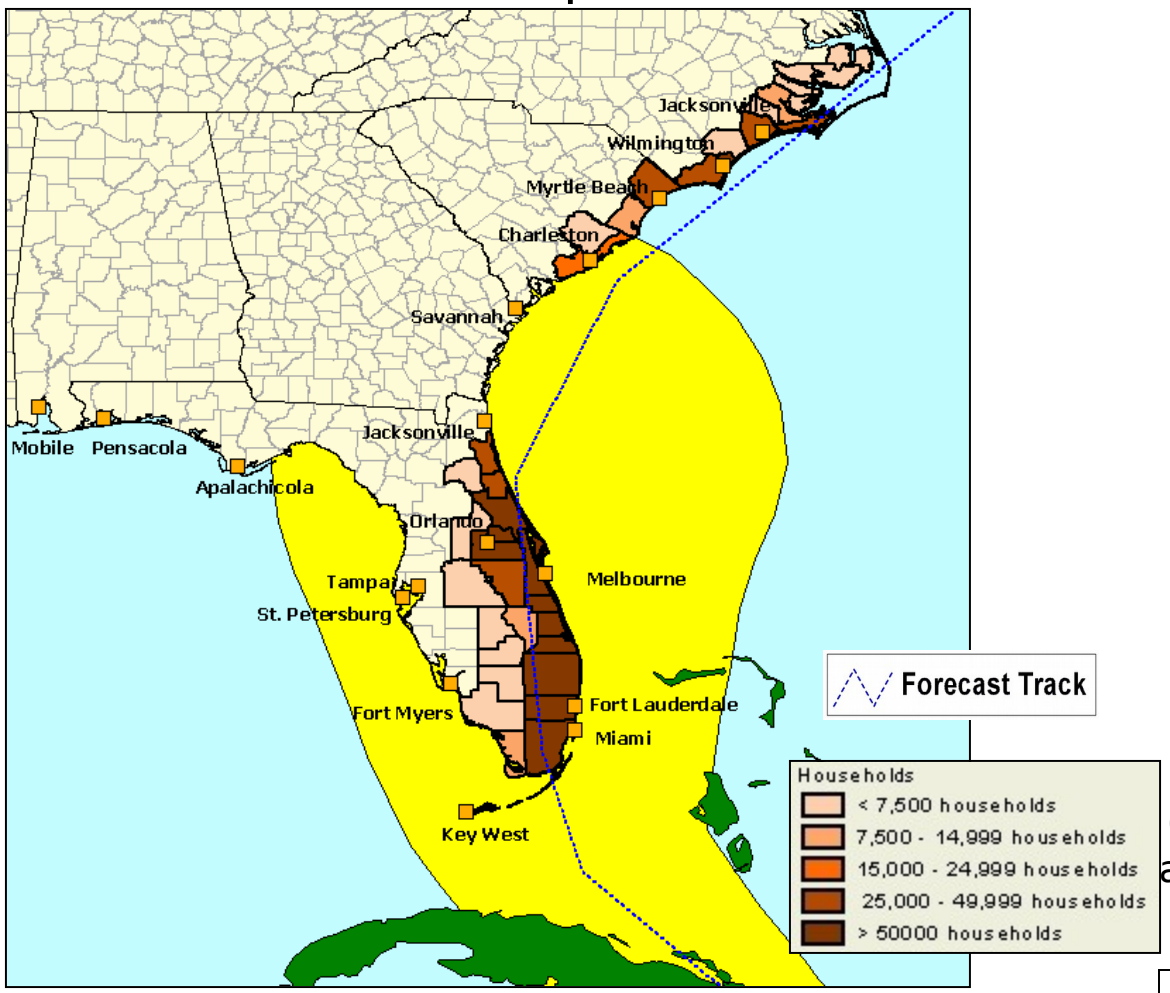


Post Landfall Households Model Results

Florida – 3,168,000 households
North Carolina – 193,000 households
South Carolina – 70,000 households

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast. The number of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Households Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Households Model

Landfall Expected In About **42** Hours

For Official Use Only!

STATE	HOUSEHOLDS	COUNTY	HOUSEHOLDS PER COUNTY
Florida			
		Brevard	221,000
		Broward	718,000
		Collier	1,000
		Dade	819,000
		Flagler	32,000
		Glades	2,000
		Hendry	6,000
		Highlands	5,000
		Indian River	56,000
		Lake	2,000
		Martin	61,000
		Monroe	11,000
		Okeechobee	14,000
		Orange	184,000
		Osceola	29,000
		Palm Beach	532,000
		Polk	1,000
		Putnam	1,000
		Seminole	132,000
		St Johns	42,000
		St Lucie	96,000
		Volusia	203,000
Florida	3,168,000		

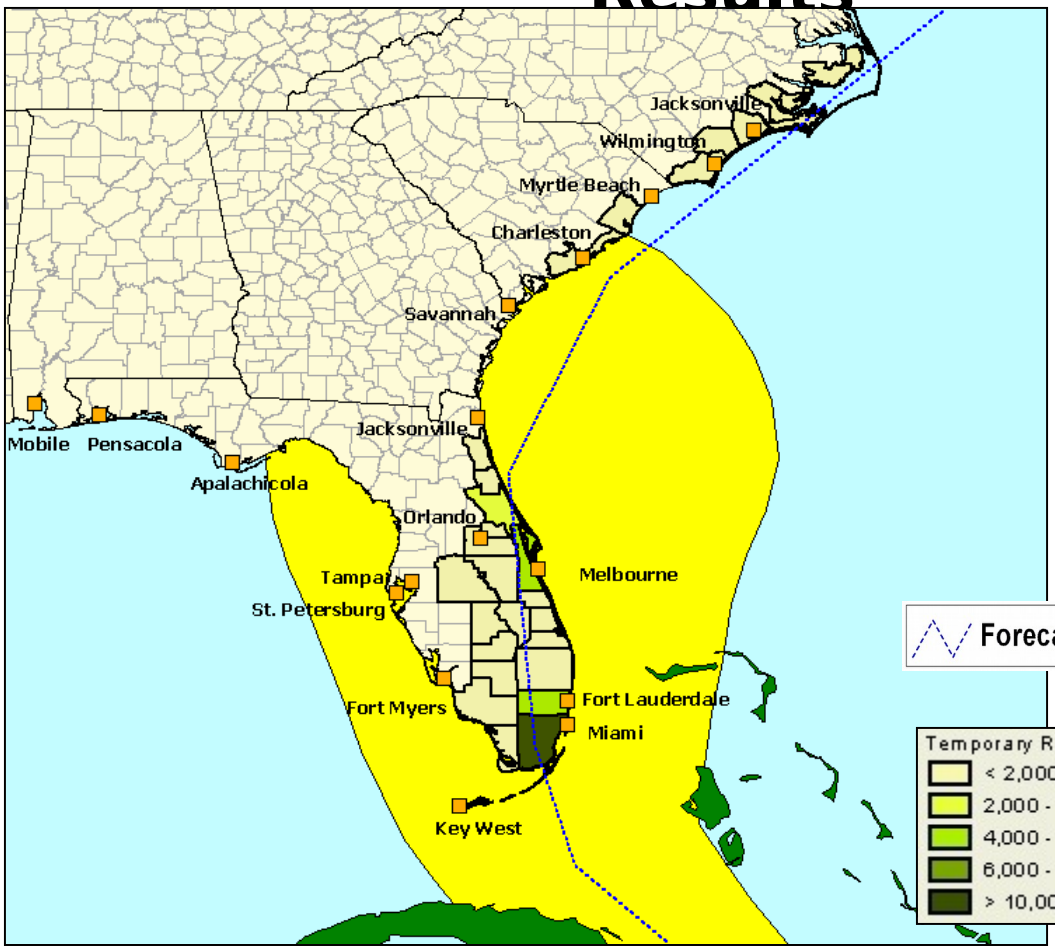
STATE	HOUSEHOLDS	COUNTY	HOUSEHOLDS PER COUNTY
North Carolina			
		Beaufort	1,000
		Brunswick	31,000
		Carteret	27,000
		Craven	11,000
		Dare	6,000
		Hyde	1,000
		Jones	1,000
		New Hanover	76,000
		Onslow	28,000
		Pamlico	4,000
		Pender	6,000
		Tyrrell	1,000
North Carolina	193,000		
South Carolina			
		Berkeley	1,000
		Charleston	19,000
		Georgetown	12,000
		Horry	38,000
South Carolina	70,000		

The number of households estimated to be within hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Ernesto Temporary Roofing Model Results

For Official Use Only!



Post Landfall Temporary Roofing Model Results

Florida – 17,100
North Carolina – 1,700
South Carolina – >400

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC ***(0500 EDT 08/28/2006)*** forecast. The amount of temporary roofing that may be required is based on 2% of housing units damaged in CAT 1 wind areas. This only indicates possible need – not necessarily a mission to repair roofs.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Roofing Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Temporary Roofing Model Results

For Official Use Only!

Landfall Expected In About **42** Hours

STATE	HOUSE UNITS	COUNTY	HOUSE UNITS PER COUNTY
Florida			
		Brevard	2,400
		Broward	3,000
		Collier	> 100
		Dade	6,900
		Flagler	400
		Glades	> 100
		Hendry	> 100
		Highlands	> 100
		Indian River	600
		Lake	> 100
		Martin	> 100
		Monroe	100
		Okeechobee	200
		Orange	500
		Osceola	> 100
		Palm Beach	300
		Polk	> 100
		Putnam	> 100
		Seminole	600
		St Johns	300
		St Lucie	600
		Volusia	1,200
Florida	17,100		17,100

STATE	HOUSE UNITS	COUNTY	HOUSE UNITS PER COUNTY
North Carolina			
		Beaufort	>100
		Brunswick	>100
		Carteret	150
		Craven	>100
		Dare	>100
		Hyde	>100
		Jones	>100
		New Hanover	250
		Onslow	>100
		Pamlico	>100
		Pender	>100
		Tyrrell	>100
North Carolina	400		400
South Carolina			
		Berkeley	>100
		Charleston	>100
		Georgetown	>100
		Horry	>100
South Carolina	>400		

THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!

The amount of temporary roofing that may be required is based on 2% of housing units damaged in CAT 1 wind areas, 4% of housing units damaged in CAT 2 wind areas and 8% of housing units damaged in CAT 3 wind areas. This only indicates possible need – not necessarily a mission to repair roofs.

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US Army Corps of Engineers

Hurricane Ernesto Roofing Model

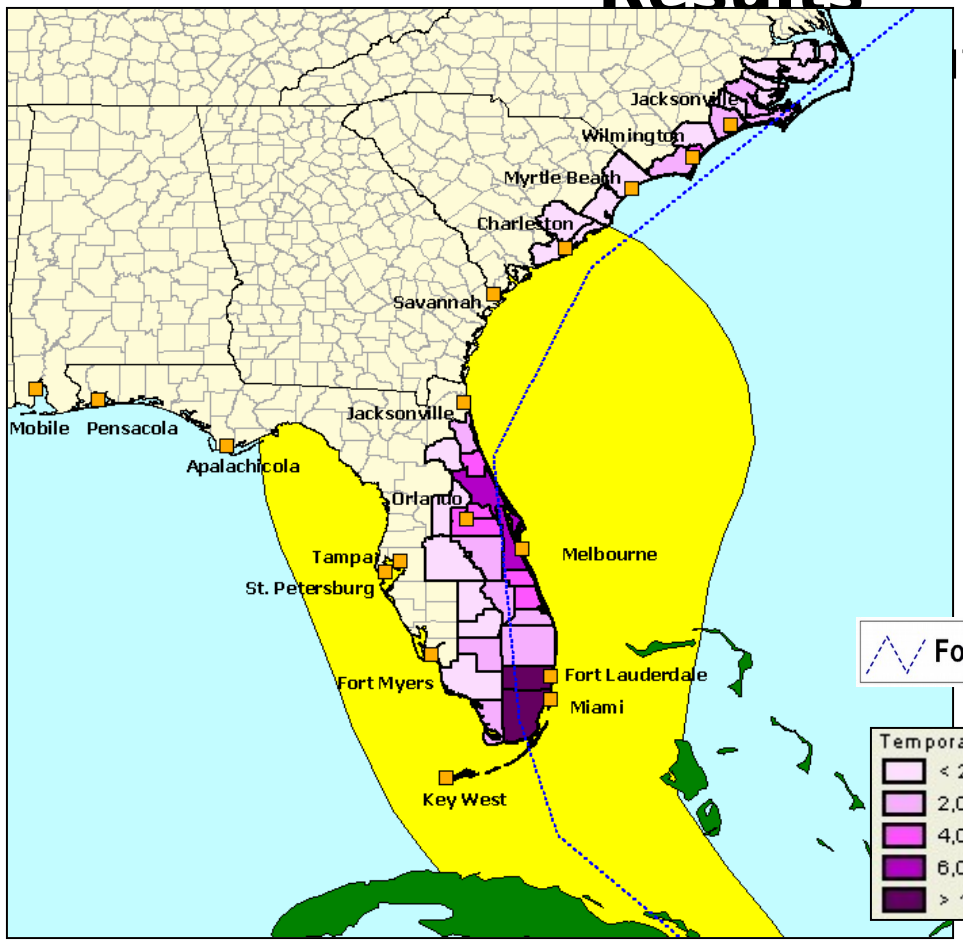
Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Temporary Housing Model Results

For Official Use Only!

...t 42 Hours



Post Landfall Temporary Housing Model Results

Florida – 2,800
North Carolina – 400
South Carolina – >400

Model results per county on following page

This model is based on a Category 1 storm making landfall south of Miami, FL.

Information provided on this page displays a Category 1 storm making landfall south of Miami, FL. These projections are based on information from the NHC (***0500 EDT 08/28/2006***) forecast. The amount of temporary housing that may be required is based on 1% of housing units requiring temporary replacement in CAT 1 wind areas.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Ernesto Housing Model

Generated By:
Siemsen, LR 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ernesto Temporary Housing Model Results

For Official Use Only!

In About 42 Hours

STATE	HOUSE UNITS	COUNTY	HOUSE UNITS PER COUNTY
Florida			
		Brevard	400
		Broward	500
		Collier	>100
		Dade	600
		Flagler	150
		Glades	>100
		Hendry	>100
		Highlands	>100
		Indian River	200
		Lake	>100
		Martin	>100
		Monroe	>100
		Okeechobee	>100
		Orange	100
		Osceola	>100
		Palm Beach	100
		Polk	>100
		Putnam	>100
		Seminole	100
		St Johns	100
		St Lucie	200
		Volusia	350
Florida	2,800		

STATE	HOUSE UNITS	COUNTY	HOUSE UNITS PER COUNTY
North Carolina			
		Beaufort	>100
		Brunswick	>100
		Carteret	150
		Craven	>100
		Dare	>100
		Hyde	>100
		Jones	>100
		New Hanover	250
		Onslow	>100
		Pamlico	>100
		Pender	>100
		Tyrrell	>100
North Carolina	400		400
South Carolina			
		Berkeley	>100
		Charleston	>100
		Georgetown	>100
		Horry	>100
South Carolina	>400		

THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!

The amount of temporary housing that may be required is based on 1% of housing units requiring replacement in CAT 1 wind areas.

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US Army Corps of Engineers

Hurricane Ernesto Housing Model

Generated By:
Siemsen, LRL 0600 EDT 08/28/2006

Sources:
HURREVAC
LRL-DEBRIS